SEQUENCE LISTING

<110> FREEDMAN, JONATHAN H.
LIAO, VIVIAN H.C.

<120> STRESSOR REGULATOR GENE

<130> 1579-315

<140> 09/437,450
<141> 1999-11-10

<150> 60/109,281
<151> 1998-11-20

<160> 72

<170> PatentIn Ver. 2.1

<210> 1
<211> 165
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 1
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tgttgttgtg tttattccct gacctatcca tattcccttc ttcccaatct ctaaagatat 120
acctgaaaac gagtttttg aatacttgat acatttgtct tcatc 165

<210> 2
<211> 154
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 2
tggattgtgc gggtggtact gccaagtctg gtcgtgatag aaaacatcag gcgatcatgc 60
ctttacgtgg taagatcctg aacgtcgaaa agcaatggaa cataagatct acgaaaatga 120
ggagatcaaa aacatgttta cagctttggt ccta 154

<210> 3
<211> 264
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 3
tggattgtgc ggagtataag caaaaatttc tggaaaagtc gggtgatatg aagtttgata 60

agatcttcaa tcaaaagctc ggtttcttgt tgttaaaaga ttccgcagga aaatgtctcc 120
gagagtccgt gtcctcaaat taaattctac gaggcgatca aagaatacga gaaaatggag 180
acaccagatg agcgattaac aaaagcacga gaaatttatc gatcatcata tacggttgaa 240
ttccgtcgcg caatcgtcac actc 264

<210> 4
<211> 187
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 4
aaatttttat taaaataaaa taaacatgtt tttgttgata ttatagcgtt aaagctgaaa 60
tgacaatgat tagaaaacca gcagagaata gagatgatgt tcctttcgtt gttgtttcca 120
gtgaacactt gttgcggtgg agcccgtatt tagcgagtgg tagtttttga tgtgattggt 180
tccaatc 187

<210> 5
<211> 267
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 5
tggtactcca cctacaagtt ctacaagttc tacgaggttg tcctgatcga tccattccac 60
aaggctatcc gtcgtaaccc agacacccaa tggatcacca agcctagttc acaagcaccg 120
tgagcaaaga ggactcacct ctgctggacg caagttcgtg gactcggaaa gggattgctt 180
ttctctgcta cccgcggagg atcccaacac caaagttttt ccacccgcca accgataaat 240
cttgttattt tattttgttt tgggttt 267

<210> 6
<211> 292
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 6
ttttttttttt ttttcccaac cccttcacat aaaggcggaa aaccgattgt tgctgttact 60
tgttgttgtc gtttattccc tgaggtatcc atattccgct tctcccaatc tctaaagata 120
tacctgaaaa cgagttgtcg tcgaaatact tgatacatgt tgtcttcatc ctggtgtatg 180
ttgtttcgca aattcttcat actagttatg ataggatttg aatgagctgg cacgagtcaa 240
ctttgaactc gaatttcaat attttcgtga tcctgcatta agtgatgaat aa 292

<210> 7
<211> 314
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 7
tctgagctag gaggtccagg aggaaacaac ggaggaggtg ctggaaatgg tggattcgac 60
gattttgatg atttggctcg ccgtttcgaa gaactgaaaa agattaagta atcatcaccc 120
gacgttccat tccttattaa ctatttgttt ctcttccacc caatttttt ttcacgtgtc 180
tttttttgta tcataaatga gacccccaaa aactagctgt ttcttagtgc atacgttaaa 240
acccctttag tcattgatta tcattgtata cctcattatc cgaaaaacct ttcgacattc 300
atcaactagg tttt 314

<210> 8
<211> 189
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 8
tctgagctag ggaccgaaat tcacaaatat ccaattgtta ctggatggtg gggatgtgga 60
cgatttaatg gggacaagcc actgaagtgt atgttatttc attcgttaaa tatgaagatg 120
gaggagagtg aatggggatt ttgcttcttt tgcaaaatgg cctccctatg tacctgaaaa 180
aaaaaaaaa 189

<210> 9
<211> 171
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 9
tctgagctag gaaaggacgg agaagatgga gagaacggag ctgctggagc cgctggacca 60
aagggatctt gcgaccactg cccaccacca cgcactcccc aggatattaa ttcacttctc 120
tctaatttta gtgaatctca ttctaataaa aagccgcccc aaaaaaaaaa a 171

<210> 10
<211> 289
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 10
ttttttttt tttgagcgag cgtttattat ttgagtcgag cttgggttga gtcgtcagct 60
gaacatgaag attgacaaag aagacgatca gcagcaacag atgcgcagag tcgcattctt 120
tgcggttgct gtctcaactg cagccgtcat ttcaagcatc gtgactctcc caatgatcta 180
ctcttactct tcaatctttc caatcccatt tgatcattgg aaaccgagtt ctgtaaaact 240
gtgctcgtga tatgtggtgt cgaagttctc cacaagtcag gtgtaccct 289

<210> 11
<211> 162
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 11
ctccaccgca acaagtgttc acgtggaaac aacaacgaaa ggaacatcat ctctatctct 60
gctggttttc taatcattgt catttcagct ttaacgctat aatcaacaaa aacagtttat 120
tttattttaa taaaaattta ttcgtgcaaa aaaaaaaaaa aa 162

<210> 12
<211> 140
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 12
tagggcctgg ttgtgacaat gtgcactaaa atggggcatg aatatcacca gcagagttca 60
cttacccaaa gtgtacttat taagagtcaa ctgtgaagta tatgagacat ttcagttgcc 120
tgcccaaaaa aaaaaaaaaa 140

<210> 13
<211> 308
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 13
tagttaggca caggatgtac gaggaaattc tactattttc gggtctcacc acgaaatcac 60
aataacccgg atttttttagt ggtccccgca cgttgaccta ctggcgcgtc aggcactccg 120
ccgcgacatt cgccgacacg cctacaatcc acgtgtcaat cgtcagattt gcggatcaat 180
aatggtgatg aaaggtggaa atacgtatat ggatcatgtt caaaggcatc aagctgaaca 240
attcgaagag ttgaatcggc gtcgacactt ttgatccaag accgtaagaa atttgaaagc 300
tattggtg 308

<210> 14
<211> 238
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 14
ttttttttttt ttttggggag gaaatcacgg cttcggatgc aacagtcttc tctcaattgg 60
caactgtcta ttatccattc cgcaatcaca tttcggatgt tctcgaaaag gacttcccaa 120

agttattgga gtactgtgaa agagttcgtc atgaagttta cccaaaggac tttactatgt 180
gaattaaatt gtcaaactag tagtcagatc aataaaattt tccgcgcgaa aaaaaaaa 238

<210> 15
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 15
tagttaggca caggatgtac gaggaaattc tactattttc gggtctcacc acgaaatcac 60
aataacccgg atttttttagt ggtccccgca cgttgaccta cttggcgcgt caggcactcc 120
gccgcgacat tcgccgacac gcctacaatc cacgtgtcaa tcgtcagatt tgcggatcaa 180
taatggtgat gaaaggtgga aatacgtata tggatcatgt tcaaaggcat caagctgaac 240
aattcgaaga gttgaatcgg cgtcgacaac tttttgatcc aagaccgtaa gaaatttgaa 300
agctattggt gaaaaaaaaa aaaa 324

<210> 16
<211> 272
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 16
tggtactcca cgcagaaaga agaaggtcat ccacaacacc gctactaccg atgacaagaa 60
gcttcaaagc aatttgaaga aactctctgt caccaacatt ccaggaatcg aggaggtcaa 120
catgattaag acgatggaac cgttatccac ttcaacaacc caaaagtcta aacctctgtt 180
cccagccaat accttctctg tcacaggatc agccgataac aagtcagatc actgaaatgt 240
ctcccaggga atgctgaact ggtcagagtc ct 272

<210> 17
<211> 218
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 17
ttttttttttt tttcgacaag cggggactaa aagcaagctt ttcatccacc gatgatacaa 60
ggcgttttta gtaccttagg atcgactgac ccacatccaa ctactgttcc acgtggaacc 120
cttctccact tcagtcttca aggatcgaac ttgaatattt gctactacca tacgatctgc 180
actgacggaa agtccagccg agcctacctc atagttaa 218

<210> 18
<211> 238
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 18
ttttttttttt ttttgccggg cggtgtgtac aaccggcagg gacgtaatca acgtgagctg 60
atgactcgcg cttactaggc attcctcgtt taagggcaat aattacaata ccctatcccg 120
gacatggaag aatttcaacg gtttaccgat acctttcaac acgggaaaac tacccggttg 180
gacaccatta ggactgacag attgaaagtc tttgtcgatt tggtggttgg ttgtgcat 238

<210> 19
<211> 253
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 19
tagggcctgt tggttgatgc ttgtccggcg cagttctgtc tgcttgatac ttcgggttga 60
tggcggacta gtgattgtgc ttcttgcgga ccgtttctgg tgtgtgcttg gacctcggtt 120
ctagtatcct gatcgctcat ctatcaaccg tactgtaacc ggtacgactc agggaatccg 180
actgtctaat taaaacagag gtgacagatg gtccttgcgg acgttaactg tcactgattt 240
ctccccagtg cac 253

<210> 20
<211> 277
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 20
ttttttttttt tttgggggggg gcggtgtgta caaagggcag ggacgtaatc aacgtgagct 60
gatgactcac acttctaggc attcctcgtt taagggaata attacaatac ccatcccgga 120
catggaagaa tttcaacggt ttaccgatac cctttcggca acacgggaaa actcacccgg 180
tccggacacc attaggactg acagattgaa agctctttct cgatttggtg gttggtggtg 240
catggccgtt cttagttggt ggagtaccaa tcactag 277

<210> 21
<211> 216
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 21
tagcaagtgc ggagacaaat gtgaatgcag tggagacaag tgttgtgaga agtactgctg 60
tgaggaggcc agtgagaaaa aatgctgtcc agctggatgt aagggagact gcaagtgtgc 120
aaactgtcat tgtgcagagc agaagcagtg cgagacaaga cccatcaaca ccagggaact 180
gctgcggctc attaaaatgt ttcagagttg aatcta 216

<210> 22
<211> 356
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 22
caatcgatga gtatcctcgt acaattaatg catgatgcaa ttggaaatat tccgaggtag 60
gtaaaacggg gaacatcacg agatagatga atacagcgga tatcatatag gcacgcagaa 120
tatcaataaa attttcaaat tttcaaaata tcataacgat tataacacgt agcagggaat 180
tttaaagcca ctgaaataaa tatagaataa tatatacaga cacacacaat ctagatttca 240
gaacattttc agtaacgacg tttgaacttt tttgaagatt tcgccgagcc tttgatcact 300
tttgcagtca caacttccac aactttcttt tcctcctctt cctctacatc gattgc 356

<210> 23
<211> 199
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 23
taaactctat gtttatttgt tttttcaaat ttcaaattga aaattgaaac tttcaatttg 60
attagagtct ttgtggtttg actccttttt ttcattgaac atcttttacg tacgtcatac 120
ttttgtatac acatttacaa atgttgtttt gtaattatat gtaacaaatt tctatgtaca 180
cctcatctca tctctctat 199

<210> 24
<211> 326
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 24
cgtctccctt ttttacttac ttgtaggtgc gtcttgtcaa ttgtacgtac ttatatttag 60
caaacctctg gtgttacctc tgctttttg taaaatttgt tacacacttt ctttttggca 120
gtaaaagttg tttagcacac tttaacactc tgccactacc aaggtaatag tgagcccatc 180
gaggttttat aaatgtcctt gatagtttaa agtgttggag gatcgagcta ctttggtagt 240
ggaaagccgt gtttcttgtc ttgttttgtt cgatgattta cccaactatt tgatattttg 300
atttaccgga ttatataata cacccc 326

<210> 25
<211> 147
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 25
tggcaatata cctagaaaga gtaaatatta tgacgtggca ataatacaga agcagtccga 60
actacaactc acgaaacatt ttgaaagttt acctcttgat ttcttttgaa tgttttgtct 120
cacacaataa agaaaattct accgtac 147

<210> 26
<211> 285
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 26
cgtggcaata cacagaatat acacattgag atggttcgaa tggcaaagag aaggtggtgg 60
ctaatcattc tatatagcac aacgccaaat ataatttcga tgtggcggaa tttgtgatgg 120
tgaatggaat taacaaaatt ttctaaacgt cttcattccg agtaattttt cgttttccct 180
ccacttttcg atttatattg ttttcttaga aaaagtattt attgcatcgg gtgctcattg 240
tctttgtgta gaatataaac tcgttcactt cccaaaaaaa aaaaa 285

<210> 27
<211> 216
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 27
tagcaagtcg gagacaaatg tgaatgcagt ggagacaagt gttgtgagaa gtactgctgt 60
gaggaggcca gtgagaaaaa atgctgtcca gctggatgta agggagactg caagtgtgca 120
aactgtcatt gtgcagagca gaagcagtgc ggagacaaga cccatcaaca ccagggaact 180
gctgcggctc attaaaatgt ttcagagttg aatcta 216

<210> 28
<211> 142
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 28
gtgctggagt tgtttgtatt tcagaataaa taaaataaaa tatgatttga gtagaatatt 60
aaaataaagt ccttcacatt aaattatcaa ttgcttggcc tcgaatatct tccagctggt 120
gattgcattc gttcattcct tc 142

<210> 29
<211> 84
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 29
tagcaagtgc ggagacaaat gtgaatgcag tggagacaag tgttgtgaga agtactgctg 60
tgaggattcc agtgagaaaa aatc 84

<210> 30
<211> 217
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 30
tagcaagtgc ggagacaaat gtgaatgcag tggagacaag tgttgtgaga agtactgctg 60
tgaggaggcc agtgagaaaa aatgctgtcc agctggatgt aagggagact gcaagtgtgc 120
aaactgtcat tgtgcagagc agaagcagtg cggagacaag acccatcaac accagggaac 180
tgctgcggct cattaaaatg tttcagagtt gaatcta 217

<210> 31
<211> 292
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 31
tggtactcca cacggacaaa tacatttagt tttacaagcc gccacgcgac acgcaacgcc 60
gtaaatctac caaggtacaa caacaacatg tcaagcacag acccatatct tatttgtgcg 120
gaacgagatg gcctctactg tagtaatcga caattggact cttatccacc ggatcactta 180
acctattttg atattaatat tcctattggg atcacagggt ttgcccgaaa atgtaattat 240
gaactgaatt gaaatgtatt ataaattagt ttttattggg aaaaaaaaaa aa 292

<210> 32
<211> 188
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 32
tataggttaa gtgatccggt ggataagagt ccaattgtcg attactacag tagaggccat 60
ctgcttccgc acaaataaga tatgggtctg tgcttgacat gttgttgttg taccttgggt 120
agatttacgg cagttgcgtg tcgttggcgg cttgtaaaac taaatgtatt tttccgtgtg 180
gagtacca 188

<210> 33
<211> 289
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 33
ttttttttt ttttgtacat tatggcaaat ggaggcactg tctggttccg tggggtcatg 60
gtgcattgga tcatggtata tcctatcctg gcttctaatc ccaatgcgtt tacagtcatg 120
tgggcttgaa cgggcctagc tgagcttgga caaagttcct tgacagtacg ggtcgacaag 180
cttgacagtc agaaattagg cacttgtggg ctacaggtgc tcgtaattat tttgagagtt 240
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<210> 34
<211> 214
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 34
aaatcatggc ggcggatgca acagtcttct caattggcaa ctgtctatat cattccgcaa 60
cacatttcgg atgttctcga aaaggacttc ccaaagttat tggagtactg tgaaagagtt 120
cgtcatgaag tttcccaaag gactttacta tgtgaattaa attgtcaaac tagtagtcag 180
atcaataaaa ttttacgtgg aaaaaaaaaa aaaa 214

<210> 35
<211> 322
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 35
taggtgaccg tagagaagcc cagatattta aaatctaaag ggaaactgtt tgaccagaag 60
attagagccc agttgtctta gatagcctag taaaagtccg gaagcccaga actctcaaaa 120
taattacgag cacctgtagc ccacaagtgc ctaatttctg actgtcaagc ttgtcgaccc 180
gtactgtcaa ggaactttgt caagctcagc taggcccgtt caagcccaca tgactgtaaa 240
cgattcggga ttagaagcca ggataggata tccatgatcc aatgcaccat gacccacgga 300
accagatgtg ctcattacat ag 322

<210> 36
<211> 228
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 36
ttttttttt tttccccatt catcacacac tatcatgttt tatattcaga cctattacct 60
gtccagaaaa actgagctga aaaaatcccg gacgagcagc tccttcacat tcaaaatctt 120
ccatcatttc cccactcaat tcatttgttt tgtctttgat tttcaaattt tttgccttat 180
tattttattg ctaaattaag aaaactgtta ctttgcaaaa aaaaaaaa 228

<210> 37
<211> 255
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 37
atcattcaag aaagctatta tcagaaaaca taaatgacat agatcaagtg taaatcacat 60
atatataaag tggataaata tatatagtta aacggataag gaaattaatt aatgaatttt 120
gaaactggca gcgaaggatg aacagggaaa ggcacatgtt aaaataaatg aatgtgtata 180
atttcgtgaa gagttagtta tgttaggtga tggcagccat gcagaatgag ccattgttcc 240
gaaaaaaaaa aaaaa 255

<210> 38
<211> 433
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 38
tggtactaag ggccaataac tgagcttttg cacggcggca tcaatgataa agagaaacta 60
tttttgacgg ttaaaataac caaatttaca ccggcgagtc aatcaaaaat tctcatctgg 120
aacagcaaag tacatcggag aattgctgga aggaagcact gatgaaacta aattaactgc 180
tggatgcata ggaaaaacgt caagattgac gtggagttgg agagaaggac tatgtttgga 240
tggttactaa gattttgtaa ctggtgacaa taaggacatc acttttctaa ctaacttaaa 300
ttctttttta cttcttttct tctgaattaa ttgtgtttta aggcgaattc tatgtttcag 360
aatttattta cgtttgcttt ttcatgttta attgtaaaag taagcaattt ttccaccgta 420
aaaaaaaaaa aaa 433

<210> 39
<211> 933
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 39
catgcatctt ttttttttt ttttttttta ctgtctcaag tatgttggat tcatgtttga 60
ttattactgc tgcgctgttt ggagccgctg tcatttactt gaaaaatttc ttcactgttc 120
ctagcattaa accaaaacct gatattcaca aaaaagacta caaaaaggat gtagtctatc 180
tgtatcagat gaagagactc aagaactgtc cgaacttgtc ccctttctgc atgaaaatcg 240
agattctttg tagaatcttc aagattcctt acgagattat cacatgcacc tctgaacgct 300
ctcggaatgg attggtccct ttcgttgaac tcaatggaga gcacattgct gattctgatc 360
ttatcgaaat gcgcttgaga tcacatttta aaattccgtc gcttccaact gagctggaaa 420
ctcaatctgt tgctctaagc aagtttgcag atcaccattt gttcttcgta cttatacgat 480
ttaaaattgc tgtcgacgaa ttctacaaaa ccattatcga aataatcggt ctcccaacct 540
tcctgaattt ccttctcatg ccccttttga aggctataat cgggaaaaat gtctacaaca 600
aatgtcaggg agccattgga gattttgaat tgagtgagct cgacgagatt cttcacagag 660

atttgcgaat cgtagagaac accttggcca agaaaaagtt tcttttcggg gaggaaatca 720
cggcggcgga tgcaacagtc ttctctcaat tggcaactgt ctattatcca ttccgcaatc 780
acatttcgga tgttctcgaa aaggacttcc caaagttatt ggagtactgt gaaagagttc 840
gtcatgaagt ttacccaaag gactttacta tgtgaattaa attgtcaaac tagtagtcag 900
atcaataaaa ttctacgtgg caaaaaaaaa aaa 933

<210> 40
<211> 238
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 40
ttttttttt tttgggagga aatcacggcg gcggatgcaa cagtcttctc tcaattggca 60
actgtctatt atccattccg caatcacatt tcggatgttc tcgaaaagga cttcccaaag 120
ttattggagt actgtgaaag agttcgtcat gaagtttacc caaaggactt tactatgtga 180
attaaattgt caaactagta gtcagatcaa taaaattcta cgtggcaaaa aaaaaaaa 238

<210> 41
<211> 248
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 41
ttttttttt tttcgcatgt tgtaatacta atatttatta attttcttta attttctttg 60
ttaagtttgt atttataggt tgttgagatt tttttgcctg taattttgca actgtgattc 120
atgtatgtac tatatgaacc gaaacccccc cccgtcatac acaacagtta gtaaaacatt 180
ttaatcccat atttctcatt cccaacactc ttacaggttt tgcatcagca gcagcagtgc 240
aaacacaa 248

<210> 42
<211> 226
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 42
ttttttttt ttttgtaaca aagaactgag cactctatgg tttatcaagt ctatatgtat 60
ccgtgatgcc tactgtatcg tacatccatc tcgatcgtaa tgcattattg atcatgagtt 120
cccaaaggtc ttaatcttga caaaggtgca atagatatat atccttattt ggcactatat 180
atatgttcag aattatgact gatcgataca tatgatcaaa gttaca 226

<210> 43
<211> 212
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 43
ttcgatacag gaactacatt tacatctgtt tcaacatatc aacaatacat aacatactca 60
atccttcagg ctctgaagga ttttgagtgc gatatactgt aacaagctcg ggaaacataa 120
gtacattttt tggagctatc tttttatgtt gcgcttttct tttgtctctt tgaatgagtt 180
ttgaaatgaa ttgtctgtgc aaaaaaaaaa aa 212

<210> 44
<211> 284
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 44
tggtactcca cacggacaaa tacatttagt tttacaagcc gccacgcgac acgcaacggc 60
cgtaaatcta cccaaggtac aacaacaaca tgtcaagcac agacccatat cttatttgtg 120
cggaaggatg gcctctactg tagtaatcga caattggact cttatccacc ggatcactta 180
acctattttg atattaatat gcctgattgg ggatcacagg gtttgcccga aaatgtaatt 240
atgaactgaa ttcgaaatgt atttataaat tagtttttat tggg 284

<210> 45
<211> 214
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 45
gcaagtgcgg agacaaatgt gaatgcagtg gagacaagtg ttgtgagaag tactgctgtg 60
aggaggccag tgagaaaaaa tgctgtccag ctggatgtaa gggagactgc aagtgtgcaa 120
actgtcattg tgcagagcag aagcagtgcg agacaagacc catcaacacc agggaactgc 180
tgcggctcat taaaatgttt cagagttgaa tcta 214

<210> 46
<211> 217
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 46
ttagcaagtg cggagacaaa tgtgaatgca gtggagacaa gtgttgtgag aagtactgct 60
gtgaggaggc cagtgagaaa aaatgctgtc cagctggatg taagggagac tgcaagtgtg 120
caaactgtca ttgtgcagag cagaagcagt gcgagacaag acccatcaac accagggaac 180
tgctgcggct cattaaaatg tttcagagtt gaatcta 217

<210> 47
<211> 217
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 47
ttagcaagtg cggagacaaa tgtgaatgca gtggagacaa gtgttgtgag aagtactgct 60
gtgaggaggc cagtgagaaa aaatgctgtc cagctggatg taagggagac tgcaagtgtg 120
caaactgtca ttgtgcagag cagaagcagt gcgagacaag acccatcaac accagggaac 180
tgctgcggct cattaaaatg tttcagagtt gaatcta 217

<210> 48
<211> 216
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 48
tagcaagtgc ggagacaaat gtgaatgcag tggagacaag tgttgtgaga agtactgctg 60
tgaggaggcc agtgagaaaa aatgctgtcc agctggatgt aagggagact gcaagtgtgc 120
aaactgtcat tgtgcagagc agaagcagtg cgagacaaga cccatcaaca ccagggaact 180
gctgcggctc attaaaatgt ttcagagttg aatcta 216

<210> 49
<211> 240
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 49
ttttttttt ttgagactat gaatatttaa tttagcaagc gaatttgttg ttattagata 60
ggaagcctag aagagtgaaa attttaaaaa atgtgaggaa ctggttttgt attcagaagc 120
atataaacgt tgtcttaatt tatatatgac gttctctatg aatatagcca aaatgatcga 180
tatttttaat ccaaaaatca aacatttttg gtatacgaac ctcgccttca cggaggttta 240

<210> 50
<211> 217
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 50
ttttttttt ttttgggagg aaatcacggc ggcggatcga acagtcttct ctcaattggc 60
aactgtctat atcattccgc aatcacattt cggatgttct cgaaaaggca ttccaaagtt 120
attggagtca tgtgaaagag ttcgtcatga agtttaccca aaggcatttc atagtgaatt 180

aaattgtcaa actagtagtc agatcaataa aattttc 217

<210> 51
<211> 219
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 51
ttttttttt tttgacgaca aattatttag aaatattgca taagcgaaaa tacaatttga 60
cccgtagcaa aaaaatacat gtcgggaaaa tgagaaaaat ggttaataaa tttttaaaaa 120
aagtatataa ttcctccaac aagctactgc atgtccttgt actacaatct tctccgacgg 180
attccactct cgatcgcgga ttcggattct tcatgttgg 219

<210> 52
<211> 254
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 52
ttttttttt tttttgccca tcggaaaata gcaagcctct ccacaggtac agtaattgag 60
catttggatg atgcttcttc acagcattat ccagtgtata cttatccttt ttcgtaagag 120
tttcgaaaaa atgtccataa aaagtgttga atgacttttg ttcatctcga agcatacata 180
cgatcgaaac ggagaaatcg atagatcgaa tcaggataag tggggatact gtattgtcgg 240
atgaaaacat agac 254

<210> 53
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 53
aggtgaccgt 10

<210> 54
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 54
ggtactccac 10

<210> 55
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 55
gcaatcgatc 10

<210> 56
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 56
ccgaaggaat 10

<210> 57
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 57
ggattgtgcg 10

<210> 58
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 58
cgtggcaata 10

<210> 59
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 59

tagcaagtgc 10

<210> 60
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 60
agttaggcac 10

<210> 61
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 61
agggcctgtt 10

<210> 62
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 62
ctgagctagg 10

<210> 63
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 63
tacaacgagg 10

<210> 64
<211> 10
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 64
tggattggtc 10

<210> 65
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 65
ctttctaccc 10

<210> 66
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 66
ttttggctcc 10

<210> 67
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 67
ggaaccaatc 10

<210> 68
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 68
aaactccgtc 10

<210> 69
<211> 10
<212> DNA

<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 69
tcgatacagg 10

<210> 70
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 70
tggtaaaggg 10

<210> 71
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 71
tcggtcatag 10

<210> 72
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 72
ggtactaagc 10